

*use this as final amendment*

Application No. 10/715,855  
Reply to Office Action of November 23, 2005

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A system for operating an aircraft, comprising:  
a navigation computer comprising:  
    a first input configured to receive guidance instructions including heading,  
    vertical speed, and altitude,  
    a second input configured to receive guidance parameters, and  
    an output configured to output automatic pilot instructions computed by said  
navigation computer from said guidance instructions; and  
a flight control computer comprising:  
    a first input configured to receive control instructions,  
    a second input configured to receive said automatic pilot instructions, and  
    a command generator configured to generate a first plurality of operating  
commands based on said automatic pilot instructions in an automatic pilot mode; and  
a dedicated communication link configured to transmit the automatic pilot instructions  
from the navigation computer to the flight control computer.

Claim 2 (Original): The system of Claim 1, wherein said command generator is  
configured to generate a second plurality of operating commands based on said control  
instructions in a manual pilot mode.

Claim 3 (Original): The system of Claim 1, wherein said flight control computer  
further comprises a third input configured to receive control parameters.

Claim 4 (Original): The system of Claim 1, wherein said command generator is configured to generate said first and second pluralities of operating commands based on a single control function.

Claim 5 (Original): The system of Claim 4, wherein said single control function is embedded in said flight control computer.

Claim 6 (Original): The system of Claim 1, wherein said navigation computer generates said automatic pilot instructions based on said guidance instructions and on said guidance parameters.

Claim 7 (Original): The system of Claim 6, wherein said automatic pilot instructions correspond in nature to said control instructions.

Claim 8 (Original): The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded vertical load factor.

Claim 9 (Original): The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded roll rate.

Claim 10 (Original): The system of Claim 7, wherein said automatic pilot instructions and said control instructions correspond to a commanded yaw.

Claim 11 (Canceled).

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Claim 12 (Currently Amended): A system for operating an aircraft, comprising:

a navigation computer comprising:

means for receiving guidance instructions including heading, vertical speed, and altitude,

means for receiving guidance parameters, and

means for outputting automatic pilot instructions computed by said navigation computer from said guidance instructions; and

a flight control computer comprising:

means for receiving control instructions,

means for receiving said automatic pilot instructions, and

means for generating a first plurality of operating commands based on said automatic pilot instructions in an automatic pilot mode; and

dedicated communication means for transmitting the automatic pilot instructions from the navigation computer to the flight control computer.

Claim 13 (Original): The system of Claim 12, wherein said flight control computer further comprises means for generating a second plurality of operating commands based on said control instructions in a manual pilot mode.

Claim 14 (Original): The system of Claim 12, wherein said flight control computer further comprises means for receiving control parameters.

Claim 15 (Original): The system of Claim 12, wherein said first and second pluralities of operating commands are based on a single control function.

Claim 16 (Original): The system of Claim 15, wherein said single control function is embedded in said flight control computer.

Claim 17 (Original): The system of Claim 12, wherein said navigation computer further comprises means for generating said automatic pilot instructions based on said guidance instructions and on said guidance parameters.

Claim 18 (Original): The system of Claim 17, wherein said automatic pilot instructions correspond in nature to said control instructions.

Claim 19 (Original): The system of Claim 17, wherein said automatic pilot instructions correspond to a commanded vertical load factor, commanded roll rate, and a commanded yaw.

Claim 20 (Original): The system of Claim 19, wherein said control instructions correspond to a commanded vertical load factor, commanded roll rate, and a commanded yaw.

Claim 21 (Currently Amended): A system for operating an aircraft, comprising:  
a navigation computer configured to receive guidance instructions and parameters,  
and to output automatic pilot instructions; and  
a flight control computer configured to receive control instructions and said automatic pilot instructions, and to generate a first plurality of operating commands based on said automatic pilot instructions in an automatic pilot mode, ~~wherein~~  
~~a single control function is embedded in the flight control computer; and~~

a dedicated communication link configured to transmit the automatic pilot instructions from the navigation computer to the flight control computer.

Claim 22 (Previously Presented): The system of Claim 21, wherein said flight control computer is configured to generate a second plurality of operating commands based on said control instructions in a manual pilot mode.

Claim 23 (Previously Presented): The system of Claim 21, wherein said flight control computer further comprises a third input configured to receive control parameters.

Claim 24 (Previously Presented): The system of Claim 21, wherein said flight control computer is configured to generate said first and second pluralities of operating commands based on said single control function.

Claim 25 (Previously Presented): The system of Claim 21, wherein said navigation computer generates said automatic pilot instructions based on said guidance instructions and on said guidance parameters.

Claim 26 (Previously Presented): The system of Claim 25, wherein said automatic pilot instructions correspond in nature to said control instructions.

Claim 27 (Previously Presented): The system of Claim 26, wherein said automatic pilot instructions and said control instructions correspond to a commanded vertical load factor.

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Claim 28 (Previously Presented): The system of Claim 26, wherein said automatic pilot instructions and said control instructions correspond to a commanded roll rate.

Claim 29 (Previously Presented): The system of Claim 26, wherein said automatic pilot instructions and said control instructions correspond to a commanded yaw.

Claim 30 (Canceled).